SYSTEM AND METHOD FOR MEASUREMENTS OF DEPTH AND VELOCITY OF INSTRUMENTATION WITHIN A WELLBORE

Abstract of the Disclosure

A survey tool for use in a wellbore includes a downhole portion having an axis. The downhole portion is adapted to move within the wellbore with the axis generally parallel to the wellbore. The survey tool further includes a first acceleration sensor mounted at a first position within the downhole portion. The first acceleration sensor is adapted to generate a first signal indicative of an acceleration of the first acceleration sensor along the axis. The survey tool further includes a second acceleration sensor mounted at a second position within the downhole portion. The second position is spaced from the first position by a non-zero distance along the axis. The second acceleration sensor is adapted to generate a second signal indicative of an acceleration of the second acceleration sensor along the axis. The survey tool further includes a controller adapted to receive the first signal and the second signal and to calculate a depth, a velocity, or both a depth and a velocity of the downhole portion in response to the first signal and the second signal.

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